

Mine Warfare in Afghanistan (U)

A Defense Research Assessment



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Historical Perspective

(U) Soviet mine warfare experiences of the last 40 years have shaped doctrine and equipment designs for conventional combined arms operations. During World War II, specialized engineer units were responsible for mineplanting and mineclearing. Minelaying and obstacle building operations were conducted by the mobile obstacle detachment, or POZ. Detecting and breaching minefields, and obstacle reconnaissance were conducted by the movement support detachment, or OOD. Both of these Soviet engineer organizations proved their versatility and effectiveness on a highly fluid battlefield.

In World War II, the Central Military Technical School for animal trainers (Tsentral'naya Voyennaya Tekhnicheskaya Shkola Dressirovshchikov) trained 68,000 dogs of varying breeds. During the battle of Stalingrad, the Soviets claim their dogs uncovered about 4 million mines.

(U) While World War II continues to be the principal Soviet doctrinal reference, subsequent experience in the Middle East and Vietnam has provided valuable lessons in conventional and unconventional mine warfare. Combat operations in Afghanistan mark the first fully committed use of Soviet forces in unconventional warfare in almost 70 years.

While the Soviets are successfully employing mines and using them on a massive scale, the Mujahideen continue to launch attacks from bases within Afghanistan, and supplies still flow across Afghanistan's borders.

Mine and countermine warfare against a formidable insurgency has provided the Soviet army with valuable lessons learned which have had an impact on how mines are employed in Afghanistan.

Organic and attached engineer units are tasked with supporting Soviet combined arms operations. To accomplish their missions, engineers require various types of mineclearing vehicles, tactical bridges, and road servicing and fortification preparation equipment. In Afghanistan, counterinsurgency operations in rugged terrain test Soviet ability to overcome Mujahideen obstacles, as well as Soviet ability to emplace their own minefields.

In Afghanistan, where the primitive road network and rugged terrain slows column movement, bypassing the obstacle in some cases is difficult

In most cases, DRA forces do not conduct mine warfare operations because Soviet equipment is newer, has greater capabilities, and is better maintained. |

Because of their greater capabilities, the Soviets are better able to conduct mine and countermine operations in Afghanistan.

~~Since~~ Since the 1979 invasion, Soviet forces have demonstrated great effectiveness with anti-personnel mines. |

The kind of mine employed has depended upon the terrain and the kind of interdiction desired. In creating obstacles, Soviet minelaying units most often rely on a combination of mines.

Dating
from World War II, the mine remains a formidable
weapon in guerrilla warfare. |

The force of a man's
stride on the trip wire will detonate the mine. The
device is particularly effective in Afghanistan's
mountainous terrain.

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The munitions have been found primarily in the central border regions with Pakistan.

In conjunction with the antipersonnel mines described above, Soviet forces use a variety of antitank mines.

In addition to the mines described above, several sources have reported that the Soviets have used a chemical mine in Afghanistan. Reported to be used in the country since 1981, little is known of the mine's technical characteristics and toxic content and there is no firm evidence that it exists.

The Soviets are also reported to be using booby traps in addition to mines. The United Nations Certain Conventional Weapons Convention,¹ which the Soviets signed, bans the use of booby traps and other unconventional weapons.

open source publications since 1981 echo these Mujahideen allegations but no physical evidence has been obtained.

Aerially delivered minefields are often a preferred alternative to minefields planted by ground vehicles, as they can be emplaced faster and make better use of time and manpower.

Scatterable mines are also laid by helicopter.

The Soviets have deployed
some of their most modern and sophisticated
mineclearing equipment to Afghanistan.

cation describes this system being used to clear
river and embankment crossing sites of mines.

Soviet forces began minelaying operations about 6 months after the December 1979 invasion.

As the Soviets stepped up attacks along insurgent main lines of communication, the Mujahideen found new, clear paths.

In response to an increase in the number of Mujahideen minefields, the Soviets stepped up training sessions which focused on defuzing and recovering insurgent mines.

Neutralization of minefields has been a constant activity for Soviet mobile obstacle detachments (OODs) in order to ensure uninterrupted movement of Soviet units, enemy and Soviet minefields must be cleared.

Where speed is essential for unit survival, Soviet formations have used concentrated artillery strikes to breach mine obstacles. Although this method is seldom desired, it is most responsive.

Soviet saturation mining provides a good source of mines for the Mujahideen.

poor coordination between Soviet and Afghan units about the locations and parameters of minefields results in encroachment and attrition of friendly forces. The Mujahideen can exploit this weakness by using some Soviet minefields to ambush Soviet and DRA forces.

(U) Classes and rehearsals on mine emplacement and breaching are common. POZ and OOD personnel from battalion through division and those personnel from the engineer brigade/regiment of the 30th Army receive intensive and recurring training on insurgent mine detection and breaching (figure 25). Nonengineer personnel also receive this training. Instruction is di-

vided into 6-hour blocks over a 4-week period and is reinforced with practical hands on application. Occurring twice per year, these classes are the only opportunity for experience outside of actual combat.

(U) Students are taught to identify the major types of rebel mines and how Mujahideen emplace them. Reportedly, senior engineer instructors use a variety of British, Egyptian, Chinese, Pakistani, and Italian made mines.

(U) Mine warfare training is overseen and evaluated by special commissions of the Chief of Engineers. These commissions consist of engineer officers well trained in their specialty, Mujahideen mine warfare and equipment.

(S) Regardless of training intensity, there is carelessness on the battlefield.

Moreover, several Soviet open source articles admit that Soviet soldiers have been unable to identify their own mines and, through mishandling, became casualties.

Afghan army training and assistance is led by Soviet forces.

Mujahideen minelaying operations throughout the conflict have, in general, proved effective against their numerically and technically superior enemy.

Because Mujahideen units and sympathizers occupy most of the countryside, Soviet and Afghan forces are in constant threat of encountering Mujahideen

minefields. Moreover, the lack of a coordinated Mujahideen strategy has confused the Soviets because individual bands of Mujahideen employ mines in differing fashions. Soviet mineclearing units, therefore, encounter obstacles of varying lethality and complexity.

Sustained capability of Mujahideen mine warfare depends upon their resourcefulness with captured mines and explosives, supplies of mines and mineclearing equipment from other nations.

Mujahideen effectiveness has been measured rather by the degree to which the tempo of Soviet and Afghan convoys has been disrupted.

Mujahideen mineclearing and detection equipment runs the spectrum from crude to sophisticated. Most insurgent groups rely on locally made sling shots, hand rakes, and garden tools, while some groups use rocks and sticks. A few groups have a limited number of commercial mine detectors.

There are some standard detection and breaching procedures common to all Mujahideen groups. Procedures are different for day and night operations.

(S) The Mujahideen continued to perfect ambush tactics on Soviet convoys.

Mujahideen mine detection could
be improved by using standard hobbyist metal
detectors. |

Since World War II, the Soviets concentrated on conventional mine warfare doctrine. However, the Afghanistan experience has caused them to modify their conventional warfare tactics, doctrine, and organization.

Because Mujahideen mines are likely to be discovered anywhere along a march route, individual soldier skills for detection and excavation have been emphasized in training programs.

Quantities of mines available to the Mujahideen have increased along with their knowledge in how best to use them.

These adjustments have been made according to anticipated enemy opposition, terrain, and duration of the operation.

Soviet minelaying and mineclearing activities have been consistently challenged by the Mujahideen. The Soviets have on their side a great and continuous flow of mine warfare equipment and munitions, and effective delivery sys-

tens.

On the Mujahideen's side, ingenious exploitation of battlefield litter for the construction of mines and bombs,

the recovery and reuse of Soviet mines, and increased experience have given the Mujahideen a formidable capability of their own.